

Split

647.7601
B137078
P.C.V. N/C

Work Order ID 137078-1

Thursday, September 24, 2015 2:08:04 PM

137078

Item ID: 647.7601
Revision ID:
Item Name: Lower Deflector Assembly
Start Date: 10/13/15 Start Qty: 1.00
Required Date: 10/13/15 Req'd Qty: 1.00
Reference:

Accept *N9000040100* Setup Start *NS1*
Stop *NS2*

1
1

Cust Item ID:
Customer:

Approvals: Process Plan: MLJ Date: Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.7600	NC								

110 Pick Kit 0.00
110
Packaging Memo 0.00
Packaging

120 0.00
120
Small Fab Memo 0.00
Small Fab Assemble as per dwg and apply loctite 598 on all faying surfaces per note 5.
A/R RTV LOCTITE 598: M133275
exp. date: 05/17

130 QC5- Inspect part completeness to step on W/O 0.00
130
QC Memo 0.00
Quality Control

5x
15/10/08
DAS 36 9-89
DAS 38 9-89
OCT 15 2015

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							

Work Order ID 137078

137078

Page 2

Thursday, September 24, 2015 2:08:04 PM

Item ID: 647.7601

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lower Deflector Assembly

Start Date: 10/13/15 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/13/15 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

Identify as per dwg & Stock Location: CCP-076
065

0.00

140

Packaging

Memo

0.00

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

2/ DAS
6
9-89

OCT 15 2014

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

Quality Control

MCS

OCT 19 2015

SH 20151016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

Picklist Print

Thursday, September 24, 2015 2:08:03 PM

Page 1

Work Order ID: 137078

137078

Parent Item: 647.7601

647 7601

Parent Item Name: Lower Deflector Assembly

Start Date: 10/13/15

Required Date: 10/13/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 15-08-04 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.7611 *647 7611* Lower Deflector		Manufactured	No				Each	0.0000		1			DAS 36 9-89
						B 136946			**	(5)			
647.7612 *647 7612* Breakaway Tip		Manufactured	No				Each	0.0000		1			DAS 36 9-89
						B 136947			**	(5)			
MS20470AD6-14 *MS20470AD6-14* Rivet		Purchased	No				Each	4.0000		10			
									**				
											DAS 30 9-89		
												OCT 07 2015	

Location

Loc Qty

Loc Code

ST309

4

m130741

4

m133284

KS 43 DAS
36
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

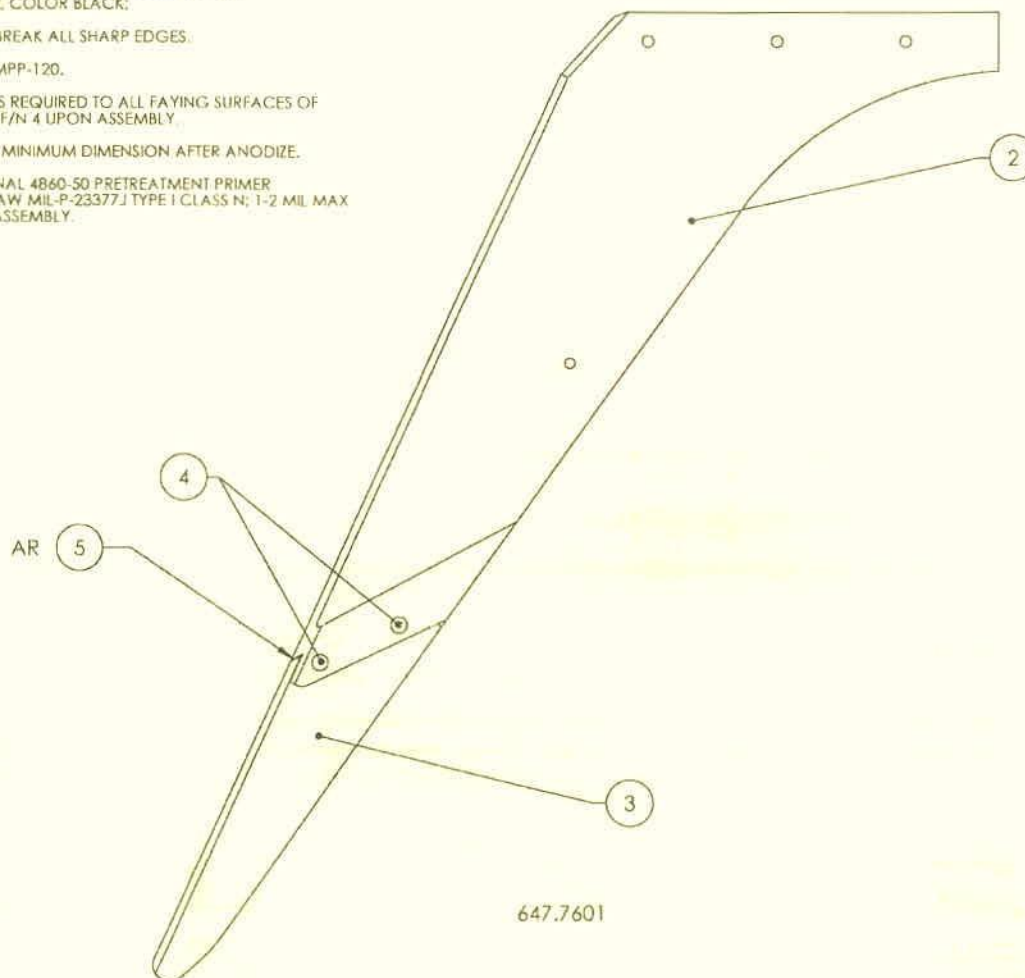
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

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NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 5 AS REQUIRED TO ALL FAYING SURFACES OF F/N 2, F/N 3 & F/N 4 UPON ASSEMBLY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER ANODIZE.
- 7 FINISH: CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX AFTER ASSEMBLY.



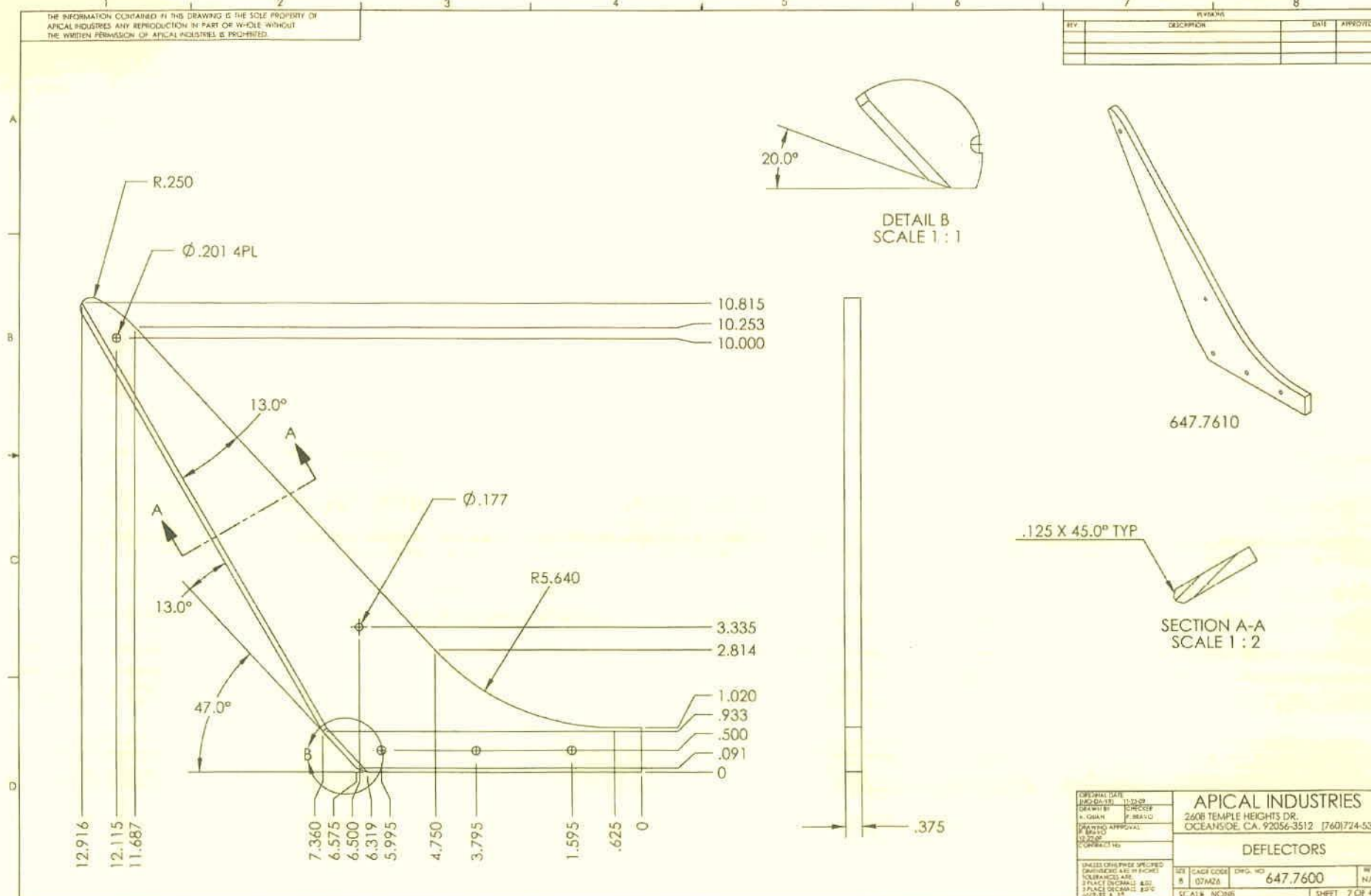
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

137078 MJS
1509-25

A/R	5	601.2045	RTV, LOCTITE 598		
2	4	601.3122	RIVET	AMS20470AD6-14	
1	3	647.7612	BREAKAWAY TIP	△	△
1	2	647.7611	LOWER DEFLECTOR	△	△
	1	647.7610	UPPER DEFLECTOR	△	△
		647.7601	LOWER DEFLECTOR ASSY		△
7601	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
PARTS LIST					
QTY	ORIGINAL DATE	REVISION	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
NEXT ASSY (S)	DESIGNED BY	CHECKED BY			
647.7400	A. GUIN	P. BRAYO			
647.7500	DRAWING APPROVAL	P. BRAYO			
	CONTRACT NO.		DEFLECTORS		
	UNLESS OTHERWISE SPECIFIED		1/16	CAGE CODE	DWG. NO.
	(DIMENSIONS ARE IN INCHES)		B	07M26	647.7600
	TOLERANCES ARE:				REV. H/C
	3 PLACES DECIMALS ± .01				
	1 PLACE DECIMALS ± .005				
	ANGLES ± .5°				
			SCALE: NONE		SHEET 1 OF 4

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REV.	DESCRIPTION	DATE	APPROVED



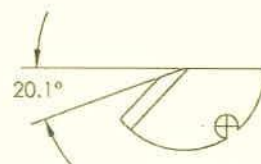
DESIGNED (DATE) (REV. DATE) 11-30-09 DRAWN BY: J. CHAN P. CHAN CHECKED BY: P. CHAN APPROVAL: P. CHAN DATE: 11-30-09 CURR. DATE: 11-30-09	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS .001 2 PLACE DECIMALS .005 1 PLACE DECIMALS .015 HOLEES & .375	DEFLECTORS SHEET 2 OF 4

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REV	DESCRIPTION	DATE	APPROVED

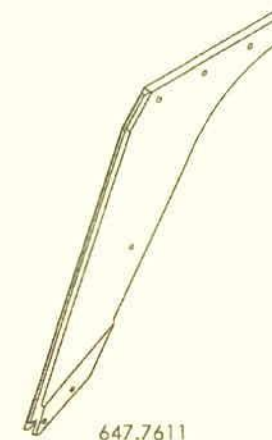
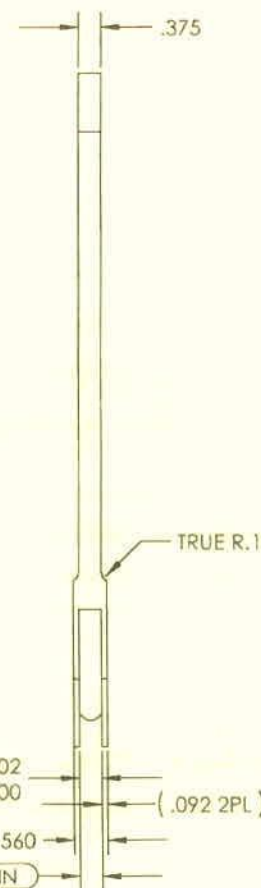
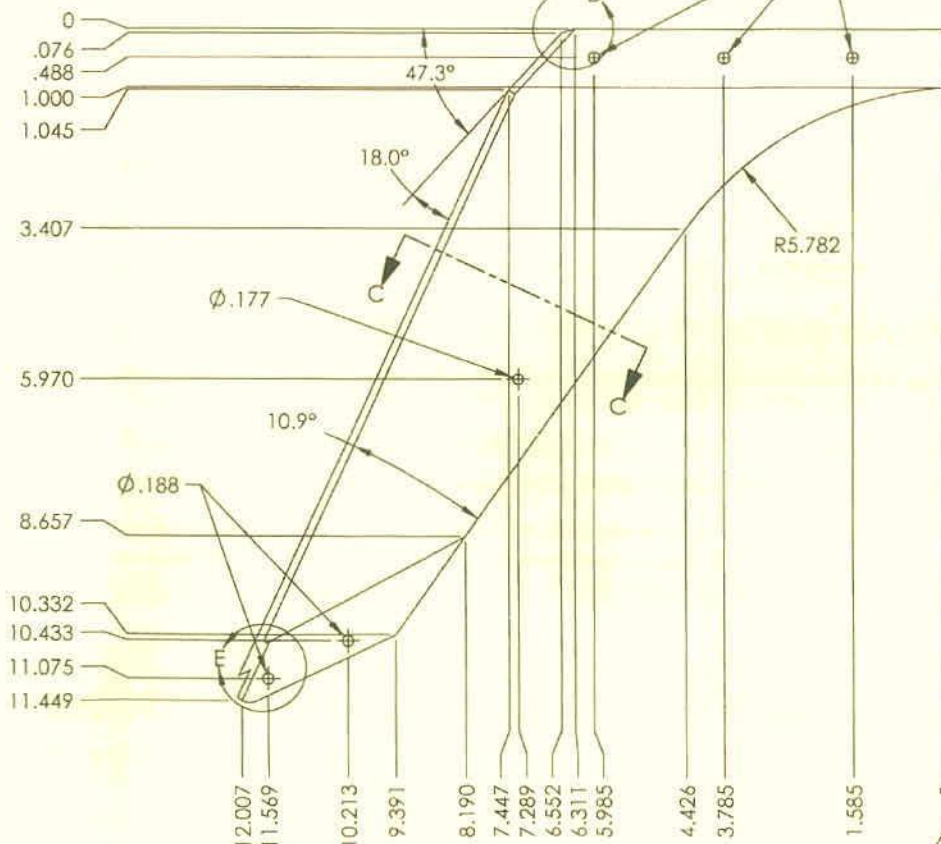
.078 X 45.0° TYP

SECTION C-C
SCALE 1:2

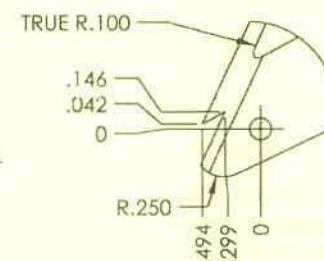


DETAIL D
SCALE 1:1

Ø.201



647.7611

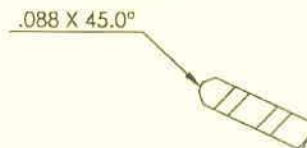


DETAIL E
SCALE 1:1

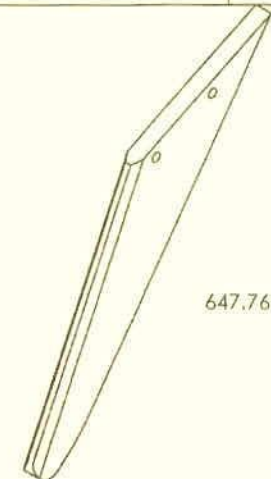
ORIGINAL DATE 11/22/09 DRAWN BY A. DSHAR CHECKED BY P. BRAVO QUANTITY APPROVAL P. BRAVO 11/22/09 CONTROL NO. 11/22/09	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 DEFLECTORS	REV H/C
(UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS .003 2 PLACE DECIMALS .010 1 PLACE DECIMALS .030 ANGLES .5°	100 8 07/20/16 647.7600 SCALE: NONE	3 OF 4

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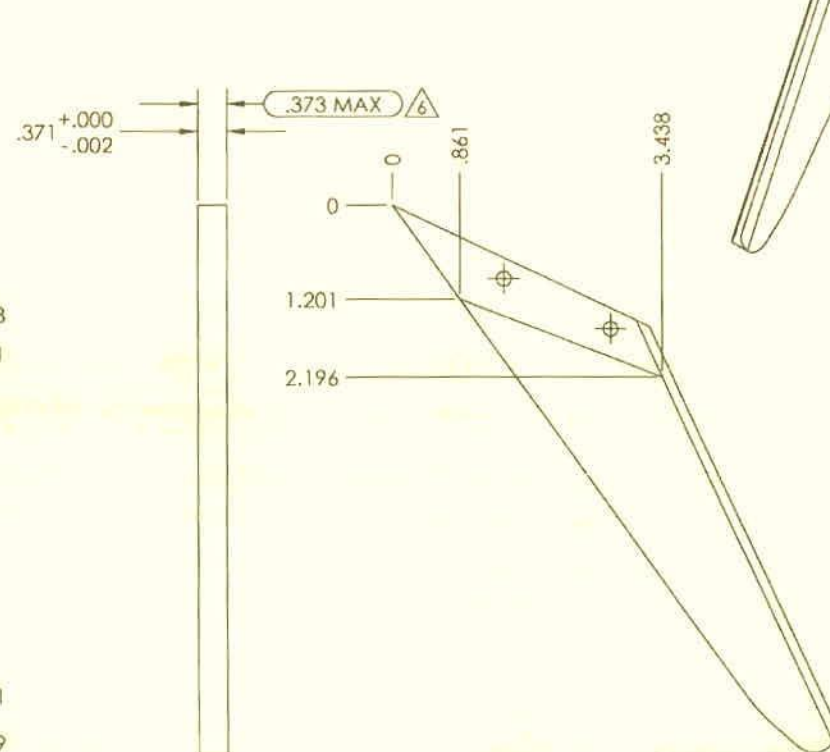
REV.	DESCRIPTION	DATE	APPROVED



SECTION F-F
SCALE 1:1.5



647.7612



ORIGINAL DATE		APICAL INDUSTRIES	
INVOICE NO. 11-2508		2608 TEMPLE HEIGHTS DR.	
QUANTITY 1		OCEANSIDE, CA. 92056-3512	
DRAWN BY A. BLAH		(760) 724-5300	
CHECKED BY F. BRAVO		DEFLECTORS	
DESIGNED BY		SCALE NONE	
UNLESS OTHERWISE SPECIFIED		SHEET 4 OF 4	
DIMENSIONS ARE IN INCHES		REV. HUC	
TOLERANCES ARE		647.7600	
3 PLACE DECIMALS .003		SCALE NONE	
2 PLACE DECIMALS .020		SHEET 4 OF 4	
ANGLES .5°			